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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,916	08/12/2004	Yasuhisa ABE	040388	4915

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WASHINGTON, DC 20006

EXAMINER

LE, HUYEN D

ART UNIT	PAPER NUMBER
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2615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/710,916

Applicant(s)

ABE ET AL.

Examiner

HUYEN D. LE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/12/04&5/15/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by the prior art (figure 2) as admitted by the Applicant.

Regarding claims 1 and 21, the admitted prior art (figure 2) teaches a method and apparatus of a speaker adapted to be installed onto a receiving member (800). The speaker comprises a frame (200, 220, 230) having the shape and the openings (the openings between the rod-shaped link sections 220 of the frame 200) at the peripheral wall thereof as claimed.

The admitted prior art further show a magnetic circuit (300 and see figure 2) arranged on the frame, a diaphragm (500) fitted to the frame, and a voice coil (600). As shown in the drawing, the frame (200, 220, 230, 231) has a fitting section (231, 910) that is formed so as to include therein the center of gravity of the entire speaker and project along a plane substantially parallel to the plane including the peripheral edges of the openings of the frame (200).

Regarding claim 2, the admitted prior art (figure 2) teaches a speaker adapted to be installed onto a receiving member (800). The speaker comprises a frame (200, 220, 230) having the shape and the openings (the openings between the rod-shaped link sections 220 of the frame 200) at the peripheral wall thereof as claimed.

The admitted prior art further show a magnetic circuit (300 and see figure 2) arranged on the frame, a diaphragm (500) fitted to the frame, and a voice coil (600). As shown in the drawing, the frame (200, 220, 230, 231) has a fitting section (231, 910) that is formed so as to include therein the center of gravity of the entire speaker and project along a plane intersecting the direction of vibrations of the diaphragm (500) as claimed.

Regarding claim 3, the admitted prior art (figure 2) teaches a speaker adapted to be installed onto a receiving member (800). The speaker comprises a frame (200, 220, 230) having the shape and the openings (the openings between the rod-shaped link sections 220 of the frame 200) at the peripheral wall thereof as claimed.

The admitted prior art further show a magnetic circuit (300 and see figure 2) arranged on the frame, a diaphragm (500) fitted to the frame, and a voice coil (600). As shown in the drawing, the frame (200, 220, 230, 231) has a fitting section (231, 910) that is formed so as to substantially along a plane intersecting the direction of vibrations of the diaphragm (500) and adapted to be fitted to the receiving member (800) so as to place the center of gravity of the entire speaker on a plane including the receiving member as claimed.

Regarding claims 4-5, as shown in the drawing the fitting section (910) projects substantially along a plane perpendicular to the direction of vibrations of the diaphragm (500).

Regarding claims 6-8, the admitted prior art (figure 2) shows the frame (200, 220) that is provided with a bottom section having an opening, and the fitting section (910) as claimed.

Regarding claims 9-11, the admitted prior art (figure 2) shows the fitting section (231, 910) that is integrally formed with the frame (200, 220) as claimed.

Regarding claims 18-20, the receiving member of the admitted prior art (figure 2) is a structure of a vehicle [0033].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art (figure 2) as admitted by the Applicant.

Regarding claims 12-17, the admitted prior art (figure 2) shows the fitting section that has a plurality of fitting positions (the fitting members 241 and the through-holes 242) to be fitted to the receiving member (800) as claimed. The admitted prior art does not specifically show that the fitting positions to be fitted to the receiving member are separated from the center gravity by

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the same distance or the center of gravity of the speaker is located with the region defined by linking the adjacent one of the fitting positions.

However, the admitted prior art does show the fitting positions (241, 242) that are arranged within an annular section (230, 231, 910).

Therefore, it would have been obvious to one skilled in the art to provide the fitting positions (241, 242) to be fitted to the receiving member at any positions such as the positions to be fitted to the receiving member that are separated from the center gravity by the same distance or the center of gravity of the speaker that is located with the region defined by linking the adjacent one of the fitting positions for better installing the speaker to the receiving member.

However, the admitted prior art does not restrict to any application for the receiving member (800).

Therefore, it would have been obvious to one skilled in the art to install the speaker of the admitted prior art

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Czerwinski (U.S. patent 4,239,943) teaches a frame (17) of a loudspeaker (10) that includes a plurality of link sections (figure 1).

Sugiyama et al. (U.S. patent 6,763,120) teaches a speaker that is mounted on a printed circuit board.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUYEN D. LE whose telephone number is (571) 272-7502. The examiner can normally be reached on 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SINH TRAN can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



HL
February 3, 2007



HUYEN D. LE
PRIMARY EXAMINER